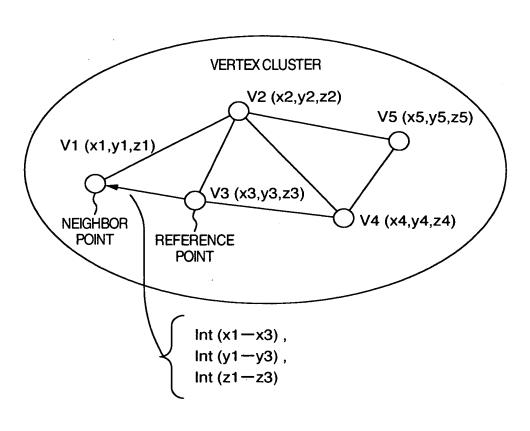
FIG.1



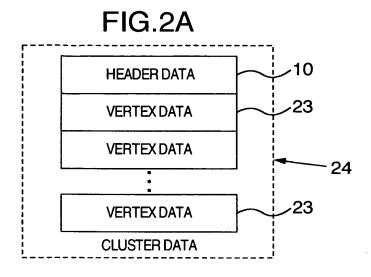


FIG.2B

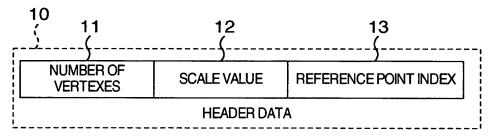


FIG.2C

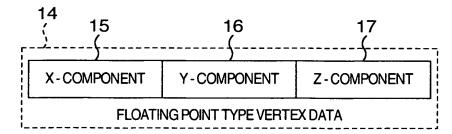


FIG.2D

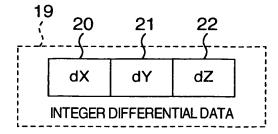


FIG.3A

j

INTEGER DIFFERENTIAL EXPRESSION OF IN-CLUSTER COORDINATES (REFERENCE POINT=V3)

VERTEX	X-COMPONENT	Y-COMPONENT	Z-COMPONENT
V1	Int (x1-x3)	Int (y1-y3)	Int (z1-z3)
V2	Int (x2-x3)	Int (y2-y3)	Int (z2-z3)
V3	х3	у3	z3
V4	Int (x4-x3)	Int (y4-y3)	Int (z4-z3)
V5	Int (x5-x3)	Int (y5-y3)	Int (z5-z3)

FIG.3B

FLOATING POINT DIFFERENTIAL EXPRESSION OF IN-CLUSTER COORDINATES (REFERENCE POINT=V3)

VERTEX	X-COMPONENT	Y-COMPONENT	Z-COMPONENT
V1	x1-x3	y1-y3	z1-z3
V2	x2-x3	y2-y3	z2-z3
V3	х3	уЗ	z3
V4	x4-x3	y4-y3	z4-z3
V5	x5-x3	y5-y3	z5-z3

FIG.4

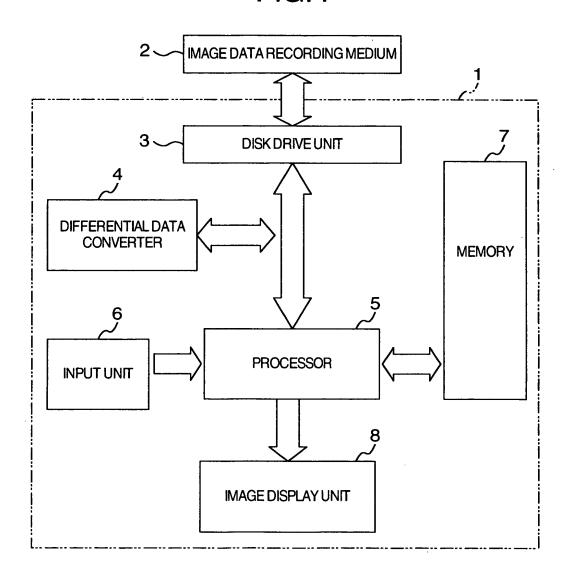


FIG.5

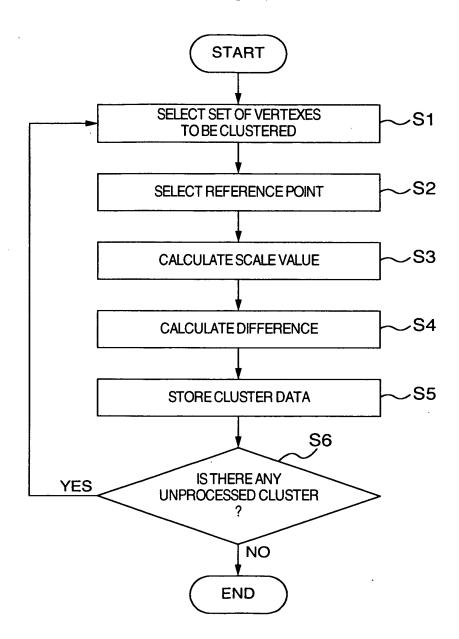


FIG.6A

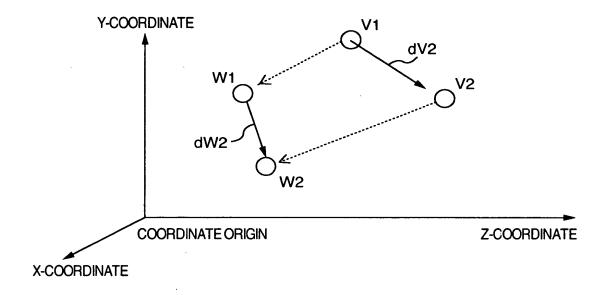


FIG.6B

AFFINE TRANSFORMATION:
$$W=M^*V+P$$

$$\begin{pmatrix} tx \\ ty \\ tz \end{pmatrix} = \begin{pmatrix} m11 & m12 & m13 \\ m21 & m22 & m23 \\ m31 & m32 & m33 \end{pmatrix} \begin{pmatrix} x \\ y \\ z \end{pmatrix} + \begin{pmatrix} p \\ q \\ r \end{pmatrix} \cdot \cdot \cdot \frac{\text{EXPRESSION}}{(2)}$$

FIG.7A

COORDINATE DIFFERENTIAL EXPRESSION BEFORE AFFINE TRANSFORMATION (REFERENCE POINT=V1)

VERTEX	X-COMPONENT	Y-COMPONENT	Z-COMPONENT
V1	X - COMPONENT	Y - COMPONENT	Z - COMPONENT
	OF V1	OF V1	OF V1
V2	X - COMPONENT	Y- COMPONENT	Z-COMPONENT
	OF dV2	OF dV2	OF dV2

FIG.7B

COORDINATE DIFFERENTIAL EXPRESSION AFTER AFFINE TRANSFORMATION (REFERENCE POINT=W1)

VERTEX	X-COMPONENT	Y-COMPONENT	Z-COMPONENT
W1	X - COMPONENT	Y- COMPONENT	Z - COMPONENT
	OF M* V1+P	OF M* V1+P	OF M* V1+P
W2	X - COMPONENT	Y-COMPONENT	Z-COMPONENT
	OF M* dV2	OF M* dV2	OF M* dV2

FIG.8A

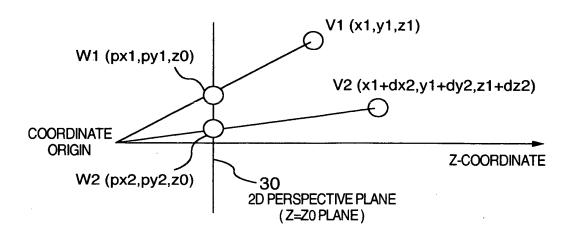


FIG.8B

A=z0/z1	EXPRESSION 1
B=z0/(z1*z1)	EXPRESSION 2
px1=A*x1	EXPRESSION 3
py1=A*y1	EXPRESSION 4
px2=(A-B*dz2)*(x1+dx2)	EXPRESSION 5
py2=(A-B*dz2)*(x1+dy2)	EXPRESSION 6
D=z0/(z1+dz)	EXPRESSION 7
px=D*(x1+dx)	EXPRESSION 8
py=D*(y1+dy)	EXPRESSION 9
$\frac{1}{z+dz} = \frac{1}{z} - \frac{1}{z^2} dz + \frac{1}{z^3} dz^2$	
$-\frac{1}{z^4}dz^3+\cdots$	EXPRESSION 10
$\frac{z0}{z1+dz2} = \frac{z0}{z1} - \frac{z0}{z1^2} * dz2$	EXPRESSION 11

FIG.9

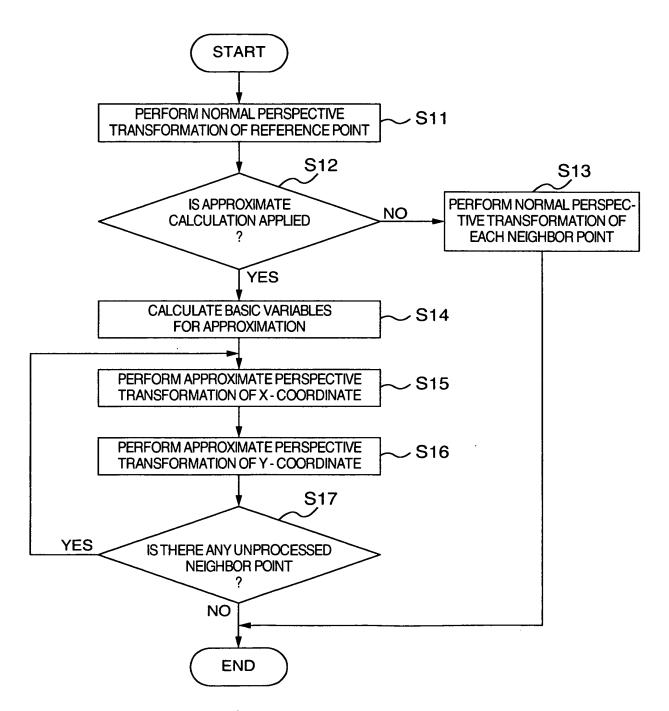


FIG.10A

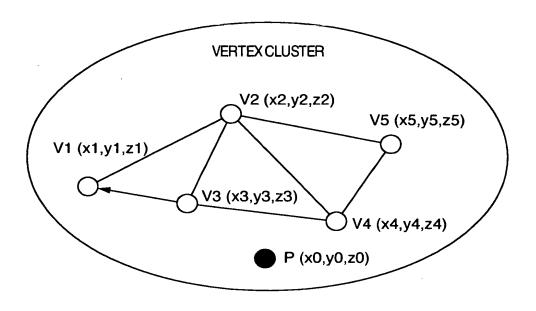


FIG.10B

INTEGER DIFFERENTIAL EXPRESSION OF IN-CLUSTER COORDINATES (REFERENCE POINT=P)

VERTEX	X-COMPONENT	Y-COMPONENT	Z-COMPONENT
V1	Int (x1-x0)	Int (y1-y0)	Int (z1-z0)
V2	Int (x2-x0)	Int (y2-y0)	Int (z2-z0)
V3	Int (x3-x0)	Int (y3-y0)	Int (z3-z0)
V4	Int (x4-x0)	Int (y4-y0)	Int (z4-z0)
V5	Int (x5-x0)	Int (y5-y0)	Int (z5-z0)

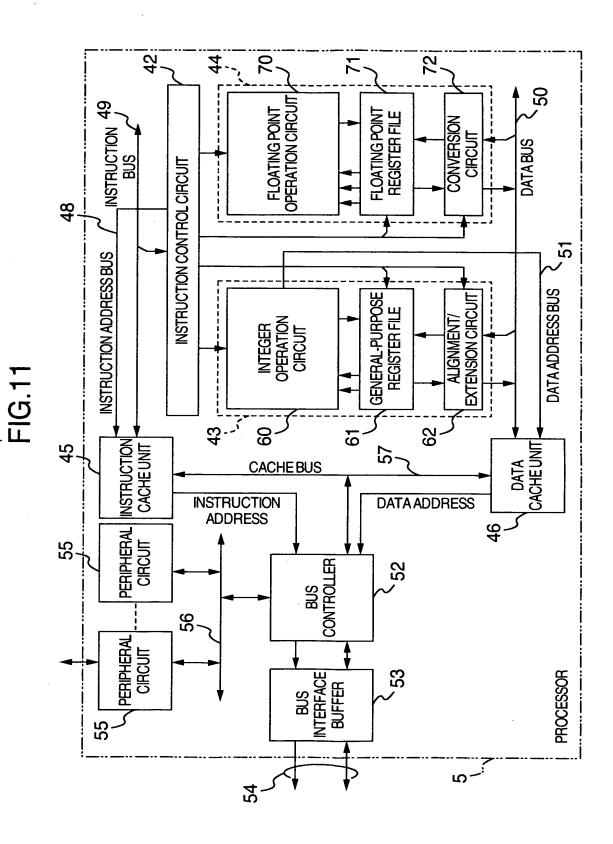


FIG.12

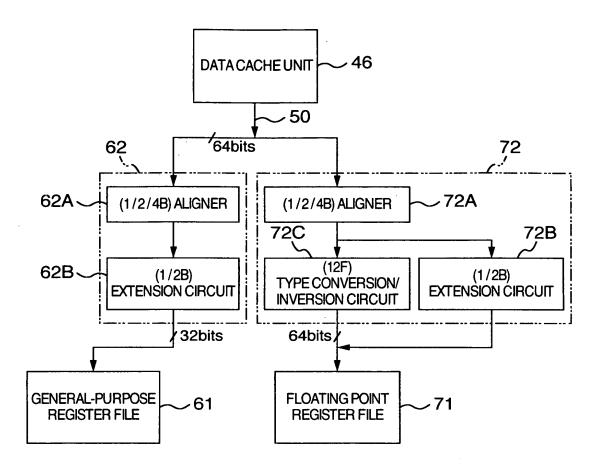


FIG.13

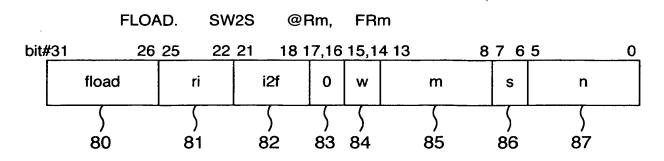


FIG.14

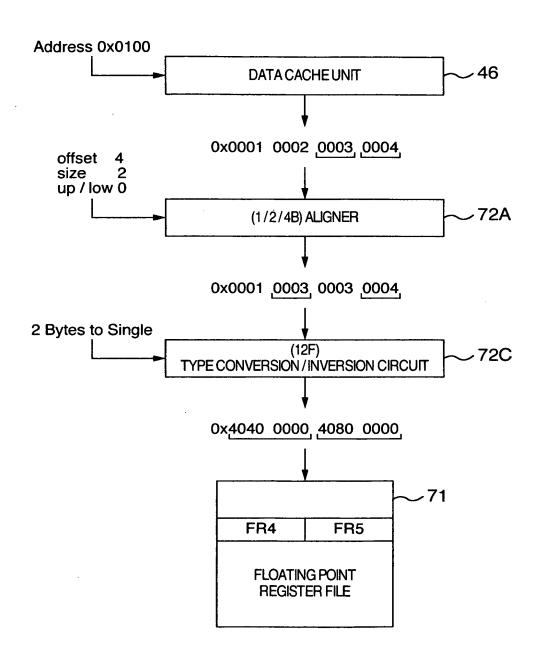


FIG.15

